

Title (en)
PRODUCTION METHOD FOR FORGED CRANK SHAFT

Title (de)
HERSTELLUNGSVERFAHREN FÜR GESCHMIEDETE KURBELWELLE

Title (fr)
PROCÉDÉ DE PRODUCTION POUR UN VILEBREQUIN FORGÉ

Publication
EP 3072609 A4 20170823 (EN)

Application
EP 14864537 A 20141120

Priority
• JP 2013240663 A 20131121
• JP 2014005850 W 20141120

Abstract (en)
[origin: EP3072609A1] A method for producing a forged crankshaft includes a die forging step, a trimming step, and an excess projecting portion crushing step. The die forging step forms a finish forged blank with flash, the finish forged blank including a shape of the crankshaft, in which crank arms (A) have excess projecting portions (Aaa, Aba) at outer peripheries of side portions (Aa, Ab) thereof near a crank pin (P), the excess projecting portions projecting from the outer peripheries. The trimming step removes the flash from the finish forged blank formed in the die forging step. The excess projecting portion crushing step crushes the excess projecting portions (Aaa, Aba) of the crank arms by pressing the crankshaft using a pair of first dies (10A, 10B), the crankshaft being obtained by removing the flash in the trimming step. With this method, it is possible to conveniently produce a forged crankshaft having reduced weight in combination with sufficient stiffness.

IPC 8 full level
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Citation (search report)
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• [A] DE 10346405 A1 20050609 - MAN B & W DIESEL AG [DE]
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• See references of WO 2015075940A1

Designated contracting state (EPC)
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